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ABSTRACT

Michigan State University developed a new instructional model which is a more comprehensive approach involving several instructional development consultants working with a group of faculty, a department, or an entire college. It involves specific agreements between clients and consultants before beginning the instructional development projects regarding specific responsibilities and the means for upgrading the faculty in necessary instructional development skills. Heavy emphasis is placed on formative evaluation and revision and systems approach. To implement the new model, consultants' skills and interests were coordinated with the type of projects being undertaken and an instructional development audiovisual package was prepared: then miniprojects were run in various departments to try out a variety of approaches. Graphic models of the new process are appended. (JY)

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MICHIGAN STATE UNIVERSITY'S NEW INSTRUCTIONAL DEVELOPMENT MODEL

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Objectives:

Following this presentation, participants should (will?) be able to:

1. Recognize the differences between the old and the new MSU ID Models.
2. Describe key features of the new MSU ID Model.
3. Describe how the transition to the new MSU ID Model is being accomplished.
4. Go away loving the new MSU ID Model.

Sometimes change may be justified by the canny instructional developer as a means for convincing our respective institutions that we are really doing something. Further, "change for change's sake," is entertaining, and can consume most of the time that we would otherwise anxiously spend attempting to develop instruction. There is no concrete evidence that either of these reasons motivated those responsible for the new MSU ID Model called the "Institutional Approach to Instructional Improvement (IAII)."

This presentation is partly a salute to he who said "There is nothing new under the Sun, only a re-arrangement of parts." For some time, the various "parts" of the MSU ID Model have existed in various stages of development in the various ID programs across the country. Instructional developers at MSU have recomposed those parts to better fit theories and preachments of Instructional Development (ID), Faculty Development (FD), and Organizational Development (OD). Like many of you, we at MSU have been using a modification of the nine step Instructional Development (IDI) Model (see Attachment A), conjoined with Barsonian heuristics and what is popularly termed the "Lone Ranger" approach to instructional development. For those of you not familiar with the latter terminology, the "Lone Ranger" approach entails one of us running to the rescue of individual faculty, where we assist in solving that faculty member's immediate instructional problem while keeping our mask intact. We then ride off into the sunset often without knowing the effects of our intervention on the target instruction, or on related instruction. While this procedure has given us a fair reputation, it has left some question in our minds about long term effects on instruction. We suspect the skills and the flair of the "Lone Ranger" approach will continue to be necessary to our individual and collective success in ID, but we are equally sure that the approach is not sufficient to carry out the effective efficient, and relevant instructional development called for and of which we are capable.

Summary of the New MSU Model

The new MSU instructional development model is a more comprehensive approach which involves several ID consultants working with a group of faculty, a department, or an entire college. It involves specific agreements between clients and consultants before beginning the ID project regarding specific responsibilities, and on means for up-grading the faculty in necessary ID skills.

The primary focus of the new ID Model is on improving the climate for innovation within the clients' social system. This may involve increasing faculty members' knowledge and skills, changing attitudes and goals, revising organizational structure, management techniques, and/or reward systems. This includes the application of the "Expanding Nucleus" technique for involving increasingly larger numbers of faculty by using specific ID principles and heuristics (see Attachment B). In this way, responsibility for on-going instructional development becomes the responsibility of the client rather than the ID consultant. Given the acceptance of that responsibility and their capability to control the pace and direction of ID activities, there is less likelihood of clients turning into ID casualties.

In addition, the new Model takes into consideration the effects of subsystems, related systems, and suprasystem on the successful installation and maintenance of the newly developed system. A careful interface analysis (see Attachment C) is carried out to ensure that the communication of necessary information takes place among key systems.

Unlike the old ID Model, the new model places heavy emphasis on continuous formative evaluation and revision. This is essential since the focus is not on product but on increasing faculty knowledge and skills so that consultant assistance can be gradually withdrawn (see Attachment D for an outline of the guidelines for use of the IAII Model in sequence). A careful look at the next section should more clearly distinguish our "new" institutional approach (IAII), from the "Lone Ranger" approach.

Key Differences Between the Old and the New

Lone Ranger Approach	IAII
1. Major criteria for acceptance or recruitment of clients was that (a) they should be willing to work with us, and (b) that resources were available for completing the ID task.	1. Major criteria for acceptance is (a) that the proposed development can positively effect the larger instructional program, (b) that the client's administrators and fellow faculty are supportive, and (c) that the produced instructional development will be maintained or expanded.
2. Accept the client's opinion about the value of the proposed instructional development	2. Complete a "needs" or "front end analysis" of the proposal before committing ID resources.
3. Client and IDer's roles evolve as the development proceeds.	3. Respective roles and input-output timelines predetermined.

4. Usually develops one or more components of a course.	4. Usually develops at least one or more courses, with an understanding that other related courses in the program will be developed or modified to complement the newly developed instruction.
5. Training of client in ID, FD, and OD skills is haphazard and does not consider the application of those skills in the client's environment.	5. Training of faculty and administrators and support personnel is systematic and timely.
6. Gentleman's (person's) agreement vaguely constructed by both client and instructional developer.	6. Transactional contract where both client and IDer's responsibility are clearly specified and agreed to, where conditions of the contract are the product of mutual planning.
7. Little attention paid to the client's organizational structure, or to the effect of that structure on the viability of the proposed instructional development.	7. Analyze relevant system and subsystem interfaces of the client's management and instructional systems and make recommendations for the required organizational changes.
8. Leave the client as soon as the agreed on instructional product or process is completed.	8. Gradually phase ourselves out as the installed ID product becomes operational and viable.
9. Little or no post-evaluation of the effects of the ID product.	9. Extensive follow-up to determine success of both ourselves and the client.
10. IDer usually works alone.	10. IDer acts as bridge between client and instructional development center personnel. ID teams formed to provide for the ID need at different points in the development process.
11. Do not provide skills required to maintain the instructional development after the IDer has withdrawn.	11. Trains client in use of learning packages for orienting new faculty members, etc., and in managing the changed instructional system.
12. Little training of faculty to carry out ID functions.	12. As the instruction progresses, client faculty are trained to carry out certain ID skills (like determining program competencies, writing objectives, developing specs for modules, etc.) so that IDers can use their time for more complex ID tasks.

13. Little responsibility for maintenance and improvement of installed instructional systems.	13. Assist client in developing an assessment/revision component that will ensure appropriate confirming and corrective feedback to students, and will ensure a means for determining program inadequacies and correcting them.
14. Attempt to carry out a large number of small ID projects concentrating on short-term effects.	14. To carry out a smaller number of large ID projects concentrating on long-term effects and spread of effects.
15. No serious attempt to develop acceptance and willingness to participate in other faculty within the client's system.	15. Using the expanding nuclei technique which gradually increases the number of participating faculty.

Transition From the Old to the New

Three specific steps are being taken to implement the new model. First, ID consultants' skills and interests are being coordinated with the type of ID projects being undertaken to overcome the "Lone Ranger" approach. This is done by identifying faculty needs and interests at their faculty's most receptive time--the most teachable moment. The appropriate consultants are then brought in to work on the project. When those specific needs are met, other faculty are assigned as new problems or needs are identified. It is also possible that one or more consultants may be assigned to permanently work with a group of clients to ensure continuity.

A second step in the transition process is the development of packaged ID instruction. These packages may take the form of standardized workshops, slide-tape presentations, printed programmed instruction, etc. Current efforts have focused on developing packages dealing with large-group instruction, micro-teaching, writing objectives, small group instruction, mastery learning, and developing slide-tape presentations.

In the third step, mini-IAII projects are being run in various departments where we are trying out a variety of approaches and ID packages related to implementation of the larger IAII Model. These departments include Nursing, Journalism, Dietetics, Family Ecology, and Instructional Development and Technology.

The fourth step involves seeking outside funding to work with an entire college or department.

ATTACHMENT A

THE INSTRUCTIONAL DEVELOPMENT SYSTEM*

DEFINE	**Function 1** IDENTIFY PROBLEM • Assess Needs • Establish Priorities • State Problem	**Function 2** ANALYZE SETTING • Audience • Conditions • Relevant Resources	**Function 3** ORGANIZE MANAGEMENT • Tasks • Responsibilities • Timelines
DEVELOP	**Function 4** IDENTIFY OBJECTIVES • Terminal • Enabling	**Function 5** SPECIFY METHODS • Learning • Instruction • Media	**Function 6** CONSTRUCT PROTOTYPES • Instructional Materials • Evaluation Materials
EVALUATE	**Function 7** TEST PROTOTYPES • Conduct Tryouts • Collect Evaluation Data	**Function 8** ANALYZE RESULTS • Objectives • Methods • Evaluation Techniques	**Function 9** IMPLEMENT/RECYCLE • Review • Decide • Act

DEFINITIONS OF THE FUNCTIONS

STAGE I: DEFINE

Function 1: **IDENTIFY PROBLEM**
Assessing needs, establishing priorities, identifying symptoms, and clearly stating a particular problem and tentative solution as agreed upon by all concerned.

Function 2: **ANALYZE SETTING**
Collecting and locating pertinent information on the instructional setting (audience, conditions, and relevant resources) as it relates to the problem statement in Function 1.

Function 3: **ORGANIZE MANAGEMENT**
Planning those activities necessary for management such as specifying tasks, assigning responsibilities, and developing time schedules.

STAGE II: DEVELOP

Function 4: IDENTIFY OBJECTIVES
Specifying terminal and enabling objectives the learner will be able to demonstrate as a result of instruction.

Function 5: SPECIFY METHODS
Determining those instructional strategies, materials, and resources that will maximize learning of a specific objective for a particular content, learner, and type of learning.

Function 6: CONSTRUCT PROTOTYPES
Selecting, designing, developing, producing, and assembling all materials for the tryout and evaluation of an instructional package or packages.

STAGE III: EVALUATE

Function 7: TEST PROTOTYPES
Trying out instructional prototypes with a representative sample of the student audience and collecting and recording evaluation data.

Function 8: ANALYZE RESULTS
Analyzing and interpreting data from the tryout and all previous Instructional Development functions such as the objectives, methods, and evaluation techniques.

Function 9: IMPLEMENT/RECYCLE
Reviewing the Instructional Development Process and making a decision to implement on a full scale as designed or to return to previous functions for revision or modification.

* From the Instructional Development Institute developed by the University Consortium.

ATTACHMENT B

ID PRINCIPLES AND HEURISTICS FOR INVOLVING FACULTY

Principle of Successive Approximations

Given that an institution interested in adopting a competency based instructional (CBI) program is primarily limited to the internal resources and skills presently available to it, if it chooses to develop the entire program by successive approximations consistently guided by the "heuristics" and the principles of CBI management, the likelihood of success will be significantly greater than if it follows a classical development model.

Principle of Structure-Induced Practice

If a person whose attitude is negative towards CBI or uncooperative, then involvement in a structure with significant others will result in the person becoming more positive and cooperative toward CBI, and more willing to expend additional energy toward the enhancement of the program.

Principle of Selective Negligence

Ignore those tasks that can be put off.

Accumulative Feedback Effect Principle

If faculty members who are involved with the development or the operation of a CBI program no matter how tangentially, are consistently provided appropriate information at the most opportune times, they will become more willing to be involved.

Heuristics of CBI Management

The heuristics here are a collection of pragmatic rules for program adoption.

1. Work within the rules of the existing management system where possible.

2. Whenever the operation of the new system makes changes in the existing management system necessary, use formal mechanisms for change that are built into the old system, whenever possible.

3. Do not ask individuals or groups to make decisions when such decisions fall outside their defined function, or when responsible parties lack sufficient information to make the most appropriate decision--especially when they have great decision making power.

4. When it is necessary to ask a relatively uninformed group to make decisions, always provide them with one or more model alternatives.

5. Always keep the key elements of a decision or a plan visible to those who are or may be affected by the decision or plan.

6. Always provide opportunity for input and decision making for those who are, or may be affected by a developing system.

7. In beginning a CBI program, or a project within it, concentrate managerial energies on interested or willing individuals.

ATTACHMENT B (continued)

8. Do not press involvement of opposing uninterested faculty, students, or administrators for short term gains.

9. Be alert to and counteract conversational or behavioral holding actions that are designed to dissipate or redirect your management system's energies.

10. Keep all the interactions among involved faculty, students, and administrators task oriented.

These heuristics have proven useful under a variety of circumstances. Like any set of tools their uses are subject to the values and purposes of those applying them.

ATTACHMENT C

INTERFACE ANALYSIS

Interface Analysis - the systematic analysis of interfaces among system and subsystem boundaries

Specifically it is the systematic determination of the information generated by and received by, a subcomponent or a subsystem of a system in terms of:

1. The perceived destination of the generated information.
2. The actual use to which the generated information should be put.
3. The perceived source of incoming or received information.
4. The degree of use of the received information.
5. Determination of what information should be generated by a component, its function, and destination.
6. Determination of what information should be received by a component and its function.
7. Determination of the appropriate form of generated and received information.
8. Determination of the time of generated and received information.
9. Determination of variance between existing generated and received information and required information.
10. Determination of who is formally responsible for generating, receiving, and applying information within the subsystem.
11. Determination of the actual generators and receivers of information in a system.
12. Determination of the mechanism used to transmit generated and received information.

(From "CBE Management Workshop" package developed by Cass Gentry.)

ATTACHMENT D

MSU IAII MODEL

INSTITUTIONAL APPROACH TO IMPROVEMENT OF INSTRUCTION

Guidelines for the MSU IAII Model, in their approximate sequence, are presented below. The model is designed to get maximum spread of effect from efforts by the Instructional Development and Telecommunication Services (ID&TS).

A. Accept or recruit clients on basis of instructional program improvement rather than individual course improvement per se.

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B. Accept or recruit clients on the basis of potential for maintaining or expanding instructional program improvements facilitated by ID&TS.

↓

C. Accept only those clients who have strong support from their key administrators of their organization.

↓

D. Assist the client in specifying the desired terminal outcomes of the instructional program improvement.

↓

E. Analyze relevant system and subsystem interfaces of the client's management and instructional systems.

↓

F. Develop a plan that integrates available instructional improvement packages in sequence with other essential program development components and strategies, for the improvement of the clients management and instructional systems.

↓

G. Draw up an agreement between ID&TS and the client specifying the responsibilities of each in the program improvement project(s), and the criteria for assessing success, with understanding that ID&TS support will be withdrawn if client responsibilities are not met.

↓

H. Train clients in the use of available instructional improvement packages in order to free L&ES staff to develop and maintain integrating components or strategies not provided in the packages.

↓

I. As appropriate client faculty develop specific OD, ID, or FD minimal competencies, they assume responsibility for developing and maintaining the part of the program calling for these skills, thus releasing ID&TS staff for other responsibilities.

↓

J. Through the instructional improvement packages and other strategies a critical mass of organizational development skills, faculty development skills, instructional development skills, are obtained, so that the client becomes self-sustaining in maintaining and continuing instructional improvement after ID&TS assistance is withdrawn.

↓

K. ID&TS gradually withdraws support as the client becomes self-sufficient.

A LITTLE HELP FROM OUR FRIENDS

NAME _____
(or anonymous)

I. Using the letters (A, B, C, etc.) alongside the steps in the handout entitled "Catalytic Model," as a map, please provide critical feedback about any of the parts of our IAII Model that you think are appropriate.

II. Please indicate any elements that you think are missing, or any factors that should be taken into account, that we may not be considering.

III. Other comments, concerns, or questions:

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